

**BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA**

DOCKET NO. 2018-319-E

In the Matter of:)	
)	REBUTTAL TESTIMONY OF
Application of Duke Energy Carolinas, LLC)	MICHAEL J. PIRRO
for Adjustments in Electric Rate Schedules)	FOR DUKE ENERGY
and Tariffs and Request for Accounting Order)	CAROLINAS, LLC

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND CURRENT**
2 **POSITION.**

3 A. My name is Michael J. Pirro, and my business address is 550 South Tryon St.,
4 Charlotte, North Carolina. I am Director, Southeast Pricing & Regulatory Solutions
5 for Duke Energy Carolinas, LLC (“DE Carolinas” or the “Company”), Duke
6 Energy Progress and Duke Energy Florida.

7 **Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. Yes. I filed direct testimony supporting Duke Energy Carolinas LLC’s (“DE
10 Carolinas” or “the Company”) overall rate design and sponsoring the proposed
11 tariffs in this proceeding.

II. PURPOSE AND SCOPE

13 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

14 A. The purpose of my rebuttal testimony is to respond to:

- 15 • The testimony of Office of Regulatory Staff witness Michael Seaman-
16 Huynh; Vote Solar witness Justin R. Barnes; NAACP, SC Coastal
17 Conservation League, and Upstate Forever witness Jonathan Wallach, and
18 SC NAACP, CCL, and Upstate Forever witness John Howat regarding the
19 Company’s proposed increase in the residential basic facilities charge;
20 • Office of Regulatory Staff witness Michael Seaman-Huynh’s testimony
21 regarding recommended rate class rate of returns;

- 1 • Vote Solar witness Justin R. Barnes’ testimony regarding the Company’s
2 AMI-enabled rate designs;
- 3 • Walmart witness Gregory R. Tillman testimony regarding the Company’s
4 Grid Improvement Plan (GIP);
- 5 • Vote Solar witness Justin R. Barnes’ testimony regarding recovery of
6 revenues under the Excess Deferred Income Tax (“EDIT”) Rider;
- 7 • and the testimony of South Carolina Energy Users Committee witness
8 Kevin O’Donnell regarding the Company’s Hourly Pricing.

9 **Q. PLEASE DESCRIBE THE REBUTTAL EXHIBITS ATTACHED TO YOUR**
10 **TESTIMONY.**

11 A. I have one exhibit to my rebuttal testimony as follows:

- 12 • Pirro Rebuttal Exhibit No. 1 - revised derivation of recommended Phase 1 and
13 2 rates in the proposed Grid Implementation Plan.

14 **III. REBUTTAL TESTIMONY**

15 **RESIDENTIAL BASIC FACILITIES CHARGE**

16 **Q. WHAT IS THE COMPANY’S RECOMMENDED ADJUSTMENT TO THE**
17 **RESIDENTIAL BASIC FACILITIES CHARGE?**

18 A. DE Carolinas proposed changing the Residential Basic Facilities Charge from
19 \$8.29 to \$28.00 to reflect full cost recovery of the customer component identified
20 in the unit cost study.

1 **Q. WHY IS THIS INCREASE APPROPRIATE?**

2 A. It is important that the Company's rates reflect cost causation to minimize
3 subsidization of customers within the rate class. Customer related costs are
4 unaffected by changes in customer consumption and therefore should be paid by all
5 customers, regardless of their consumption.

6 **Q. WHAT IS THE HARM CAUSED BY SETTING THE BASIC FACILITIES**
7 **CHARGE BELOW ITS COST BASIS?**

8 A. Residential customer-related revenue not recovered in the Basic Facilities Charge
9 is shifted to energy rates causing high usage customers to subsidize lower usage
10 customers. Failing to properly recover customer-related costs via a fixed monthly
11 charge provides an inappropriate price signal to customers and fails to adequately
12 reflect cost causation. Shifting customer-related costs to the kWh energy rate
13 further exacerbates this concern and over-compensates energy efficiency and
14 distributed generation for the costs avoided by their actions.

15 **Q. OFFICE OF REGULATORY WITNESS MICHAEL SEAMAN-HUYNH**
16 **STATES THAT THE RESIDENTIAL BASIC FACILITIES CHARGE**
17 **SHOULD RECOVER NO MORE THAN 25% OF THE APPROVED**
18 **REVENUE INCREASE ASSIGNED TO THAT CUSTOMER CLASS. DO**
19 **YOU AGREE?**

20 A. No. An economically efficient rate design minimizes subsidization between
21 customers and customer classes, and the Company has reflected this principle in its
22 proposal. While Witness Seaman-Huynh's recommendation moves to reduce
23 subsidization, the Company is concerned that deferring a larger increase at this time

1 merely shifts the need to increase the Basic Facilities Charge to a future rate case
2 proceeding.

3 **Q. SC NAACP, CCL, AND UPSTATE FOREVER WITNESS HOWAT**
4 **ARGUES THAT THE PROPOSED BASIC FACILITIES CHARGE IS**
5 **HIGHER THAN OTHER UTILITIES AND IS THEREFORE**
6 **INAPPROPRIATE. IS THIS A VALID COMPARISION?**

7 A. No. The Company's rates should be set based upon a careful examination of its
8 cost of service and an allocation of those costs to the jurisdictions and customer
9 classes based upon methodologies found appropriate by this Commission. In this
10 proceeding, the Company has examined its costs and identified customer-related
11 costs in excess of its current Basic Facilities Charge. Other utilities' cost and rates
12 are not relevant to a determination of DE Carolinas' rates.

13 **Q. ARE VOTE SOLAR WITNESS BARNES AND NAACP, SC COASTAL**
14 **CONSERVATION LEAGUE AND UPSTATE FOREVER WITNESS**
15 **WALLACH CORRECT IN ASSERTING THAT AN INCREASE IN THE**
16 **BASIC FACILITIES CHARGE DISCOURAGES DISTRIBUTED**
17 **GENERATION AND ENERGY EFFICIENCY?**

18 A. Yes, but overstating the Basic Facilities Charge discourages prudent investment in
19 distributed generation and energy efficiency. DEC offers numerous DSM and EE
20 programs that encourage customers to use electricity efficiently and wisely. The
21 purpose of rate design is to fairly recover the Company's costs from its customers
22 based upon principles of cost causation, not to necessarily encourage energy
23 efficiency and distributed generation simply for their own sake. The proposed

1 increase to the Basic Facilities Charge eliminates a false savings that exists when
2 customers make imprudent investments based on inaccurate price signals.

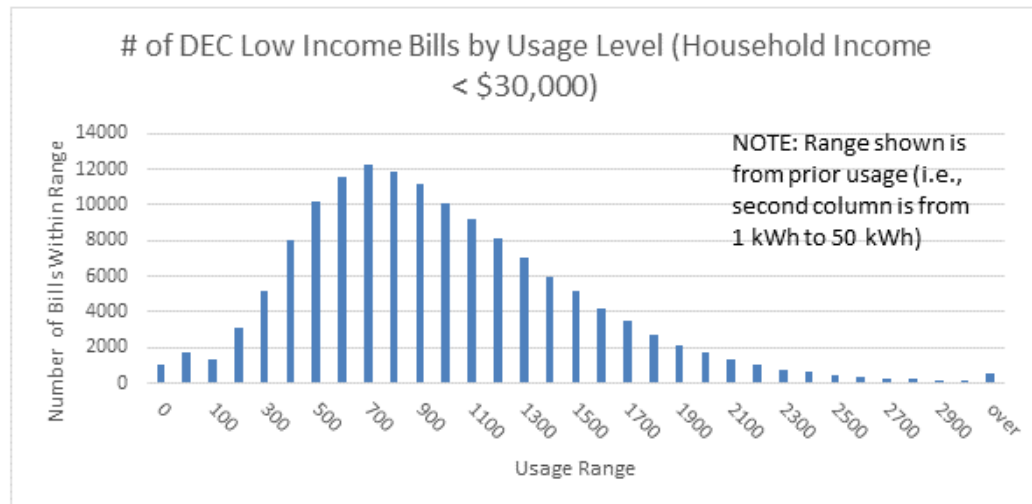
3 **Q. DO YOU AGREE WITH WITNESSES BARNES, HOWAT AND**
4 **WALLACH THAT THE INCREASE IN THE BASIC FACILITIES**
5 **CHARGE SHOULD BE LIMITED TO THE PERCENT INCREASE**
6 **APPROVED BY THE COMMISSION FOR EACH SPECIFIC RATE**
7 **CLASSSS?**

8 A. No. This approach does not follow the principles of cost causation and recovering
9 fixed costs via a kwh charge has the following detrimental consequences: 1) high
10 usage customers subsidize low usage customers; 2) low use customers do not pay
11 the full cost of the utility plant installed to serve them; 3) it does not provide an
12 accurate price signal regarding the Company's costs upon which customers can
13 make economic decisions to make investments that reduce kWh consumption; and
14 4) it will forever delay appropriate recovery of the Company's customer related
15 costs through the Basic Facilities Charge.

16 **Q. DOES THE PROPOSED BASIC FACILITIES CHARGE**
17 **DISPROPORTIONATELY HARM LOW-INCOME CUSTOMERS AS**
18 **ARGUED BY SC NAACP, CCL, NAD UPSTATE FOREVER WITNESS**
19 **HOWAT?**

20 A. No. Below, is a chart that illustrates the number of South Carolina DE Carolinas
21 customer bills by usage levels for customers with household income below
22 \$30,000. These charts demonstrate that low income customers' electricity usage is
23 quite diverse with many customers having usage above the South Carolina

1 residential monthly average of 1,100 kWh. In addition, a significant number of low
 2 income customers are clustered around the 600-1000 monthly average kWh.



3 Furthermore, since the total number of low usage customers greatly exceeds the
 4 number of low-income customers identified above obviously there are reasons
 5 other than income for low usage such as customers with second homes, vacant
 6 homes that are for sale and customers with solar panels. The Company is mindful
 7 of the impact of any rate increase on our customers, particularly low-income
 8 customers; however, the Company does not design rates based upon customer
 9 incomes as advocated by Witness Howat, but rather applies cost causation
 10 principles to the extent practical. There are other means of addressing the financial
 11 needs of low-income customers which are more effective than biasing the rate
 12 design, such as Company, state and local programs. For example, energy efficiency
 13 programs, such as the Company's Residential Income Qualified Energy Efficiency
 14 and Weatherization Assistance Program, aid low-income customers in reducing
 15 their consumption of energy at no cost to the consumer. Other Company programs,
 16 such as budget billing and payment arrangements, are available to assist all

1 customers in managing their cost for electricity. The Energy Neighborhood Fund
2 is promoted by the Company and raises funds for local aid agencies to assist low-
3 income customers. These initiatives are more effective than biasing the rate design
4 to aid low-usage customers. Finally, as mentioned earlier, inappropriately pricing
5 the Basic Facilities Charge below cost over-addresses the alleged problem, because
6 all low usage customers benefit, not just low-income customers.

7 **Q. SEVERAL INTERVENORS ARE OPPOSED TO THE PROPOSED**
8 **INCREASE IN THE BASIC FACILITIES CHARGE, ALLEGING THAT**
9 **THE COSTS IDENTIFIED BY THE MINIMUM SYSTEM**
10 **METHODOLOGY ARE NOT CUSTOMER COSTS AND SHOULD NOT BE**
11 **INCLUDED IN THE BASIC FACILITIES CHARGE. PLEASE RESPOND**
12 **TO THAT ALLEGATION.**

13 A. The rates and rate design supported by my testimony are based upon the cost of
14 service studies, including the minimum system cost study, performed by the
15 Company and accepted by the Office of Regulatory Staff. The costs in controversy
16 are distribution facilities costs. The Company's cost of service studies indicate that
17 these costs are Customer costs and therefore I designed the Basic Facilities Charge
18 to recover them. If the Commission finds that they are not properly grouped as
19 Customer costs, then, as Witness Hager explains in her rebuttal testimony and as
20 Vote Solar witness Barnes and NAACP, SC Coastal Conservation League, and
21 Upstate Forever witness Wallach state in their direct testimony, these costs should
22 be treated as demand-related costs. Therefore, these costs should be recovered via
23 a demand charge.

1 **Q. RATE SCHEDULE RS, THE COMPANY’S PRIMARY RESIDENTIAL**
2 **RATE SCHEDULE, DOES NOT HAVE A DEMAND COMPONENT**
3 **RATHER IT ONLY HAS A BASIC FACILITIES CHARGE AND A KWH**
4 **CHARGE. IF THE COMMISSION DECIDES THE COSTS IN QUESTION**
5 **ARE NOT CUSTOMER COSTS HOW SHOULD THESE COSTS BE**
6 **RECOVERED FROM CUSTOMERS ON RATE SCHEDULE RS?**

7 **A.** As Witnesses Barnes and Wallach explain in their direct testimony the distribution
8 facilities costs in question represent poles, conductors, conduit, and transformers.
9 These costs are fixed in nature like metering, service drop and billing costs
10 Witnesses Barnes and Wallach support being recovered through the Basic Facilities
11 Charge, and do not vary with customer consumption. Importantly, they are unlike
12 variable operations and maintenance costs and fuel costs which vary directly with
13 energy consumption and are properly recovered via the volumetric kWh rate. Thus,
14 recovering them via a kwh charge provides an incorrect pricing signal.

15 **Q. DO THE COMPANY’S PROPOSED KWH RATES FOR SCHEDULE RS**
16 **CUSTOMERS INCLUDE COST RECOVERY FOR SOME DISTRIBUTION**
17 **FACILITIES DEMAND RELATED COSTS THAT WERE NOT**
18 **IDENTIFIED BY THE MINIMUM SYSTEM STUDY AS CUSTOMER**
19 **COSTS?**

20 **A.** Yes. However, doing so sends an incorrect pricing signal.

1 **Q. DOES THE COMPANY HAVE A PROPOSAL TO ADDRESS THIS**
2 **RATEMAKING CONUNDRUM?**

3 **A.** Yes. The Company should revise its Rate Schedule RS to include a demand
4 component rate to recover all non-minimum system distribution costs. This design
5 would better reflect cost causation principles.

6 **Q. SEVERAL INTERVENORS AND THE ORS EXPRESSED CONCERN**
7 **WITH THE MAGNITUDE OF THE PROPOSED INCREASE IN THE**
8 **BASIC FACILITIES CHARGE FOR RESIDENTIAL CUSTOMERS, AND**
9 **RECOMMENDED THE COMPANY UTILIZE THE PRINCIPLE OF**
10 **GRADUALISM IN ESTABLISHING THE BASIC FACILITIES CHARGE.**
11 **DO YOU AGREE?**

12 **A.** The Company understands these concerns and believes there is merit in their
13 position. The Company's proposal sought to eliminate the current subsidy and
14 immediately provide customers with more accurate price signals. If the
15 Commission determines that it is appropriate to more slowly phase-in addressing
16 this issue over multiple rate cases, a smaller increase would be appropriate. A
17 possible approach to phasing in the correction was offered by the Company in its
18 recent North Carolina rate case where the increase in the Basic Facilities Charge
19 rate was set equal to 50% of the difference between the current rate and the cost
20 basis¹ Adopting this approach would reduce the proposed Basic Facilities Charge
21 to \$18.15.

22 _____

23 ¹ North Carolina Utilities Commission. Docket No. E-7, Sub 1146 Pirro Direct Exhibit No.8.

1 **Q. WITNESS HOWAT ALSO SEEKS CHANGES TO THE COMPANY’S**
2 **ENERGY EFFICIENCY PROGRAMS TARGETING LOW-INCOME**
3 **CUSTOMERS. ARE SUCH PROGRAMS INCLUDED IN THE**
4 **COMPANY’S PROPOSAL?**

5 A. No. Revenues for energy efficiency programs are intentionally excluded from rate
6 case revenues since they are considered annually in a demand-side management
7 and energy efficiency (“DSM/EE”) cost recovery proceeding. Any
8 recommendations regarding such matters are more appropriately considered in
9 those proceedings.

10 **Q. IN DESIGNING PROPOSED CUSTOMER RATES TO GENERATE DE**
11 **CAROLINAS’ REVENUE REQUIREMENT, IS IT APPROPRIATE TO**
12 **CONSIDER ENERGY EFFICIENCY PROGRAMS THAT HAVE NOT**
13 **BEEN APPROVED BY THE COMMISSION AS PROPOSED BY WITNESS**
14 **HOWAT?**

15 A. No. Rate design involves allocating a utility’s actual generation, transmission,
16 distribution and customer costs determined by a cost of service study to the utility’s
17 customer classes and developing rates to recover those costs. The issue of whether
18 DE Carolinas should propose additional energy efficiency programs as proposed
19 by Witness Howat should be addressed in DE Carolinas’ DSM/EE proceedings.

RATE OF RETURN ALLOCATION

Q. DO YOU AGREE WITH THE RECOMMENDATION MADE BY THE ORS REGARDING RATE CLASS RATE OF RETURNS?

A. Yes, the Company's approach aligns with the ORS recommendation that any revenue requirement increase be allocated in a manner in which rate of returns by rate class are as fair and equitable as practicable with continued movement towards +/-10% band of reasonableness.

AMI - DYNAMIC RATE DESIGNS

Q. DO YOU AGREE WITH VOTE SOLAR WITNESS BARNES' CONTENTION THAT THE COMPANY LACKS A CLEAR PLAN FOR DEPLOYING INNOVATIVE DYNAMIC PRICING RATE DESIGNS?

A. No. As discussed earlier in my direct testimony, the Company is actively evaluating potential rate designs that can better incent staggering and shifting of usage while we develop the infrastructure required to support such designs.

Q. WHY ARE MORE TIME-BASED RATE DESIGNS APPROPRIATE?

A. To the extent practical, tariffs should be designed to provide cost-based price signals that incent economically-efficient electric use. While current designs utilizing a single volumetric charge are efficient in collecting a revenue requirement, they do not communicate changes in the Company's cost of service based upon real time circumstances. While the introduction of both energy and demand rates is an improvement in reflecting cost causation, it still doesn't adequately discourage usage during system peak times. Time-of-use ("TOU") designs were introduced over 30 years ago and improve price signals by

1 recognizing cost differentials that occur throughout each day, but they provide the
2 same price signals during days with both mild and extreme weather. The next
3 generation of rate designs can improve these price signals and reward customers
4 that aid in reducing loads during the peak periods that increase the utility's cost of
5 service. These new designs will more accurately communicate the higher cost
6 incurred to serve load during critical peak periods and offer customer savings if
7 they reduce their usage to help mitigate these costs.

8 **Q. WHAT IS REQUIRED TO SUPPORT THESE NEW INNOVATIVE TIME-**
9 **BASED RATE DESIGNS?**

10 A. Three enablers are required to support the introduction of successful innovative
11 time-based rates:

12 (1) Granular meter data that supports pricing that more closely aligns with cost
13 causation – this leg is supported with our Smart Meter Deployment.

14 (2) A robust billing system that supports billing more sophisticated designs –
15 this leg will be well supported with our Customer Connect Deployment.

16 (3) Education and tools to aid customers in understanding tariff price signals
17 and effectively shifting usage – this is still evolving, but is a critical
18 component of a sound rate design.

1 **Q. WHAT IS THE DIFFERENCE BETWEEN THE PRIOR GENERATION OF**
2 **METERS AND METERING AVAILABLE WITH DEPLOYMENT OF**
3 **SMART METER TECHNOLOGY FROM A RATE DESIGN**
4 **PERSPECTIVE?**

5 A. The Company's historic metering could identify usage by regular watt-hour meters
6 and meters with pre-defined TOU periods, but lacked the sophistication necessary
7 to offer rates for the majority of customers that varied on a real-time basis. Due to
8 cost considerations, sophisticated metering that identified usage for each interval
9 of the month was only practical for large customers and customers served under
10 hourly pricing or curtailable rate options. Smart meter deployment now allows
11 interval level data to be available for all customers; thereby opening the opportunity
12 to provide better price signals to all customers in Company rate designs.

13 **Q. WHAT RATE DESIGN ACTIVITIES ARE CURRENTLY UNDERWAY TO**
14 **BENEFIT FROM THE AVAILABILITY OF INTERVAL METER DATA?**

15 A. Smart Meter deployment was only recently completed for DEC; therefore, the
16 Company is now gathering its first full year of usage history that is necessary to
17 properly evaluate a new rate design. The first stage of the Company's investigation
18 is to utilize data analytics to assess whether the current rate classes are appropriate
19 from a cost causation perspective. For example, this will allow us to identify
20 whether a single residential rate class continues to be appropriate or if there are
21 distinct differences within the class, from a cost causation perspective, meriting
22 further differentiation. This level of analysis was constrained in the past when
23 interval data was only available for a load research sample of the class population.

1 **Q. WHAT CHANGES ARE NECESSARY TO SUPPORT BILLING**
2 **DIFFERING RATES ON AN INTERVAL BASIS?**

3 A. First, the current customer information billing system doesn't support billing at an
4 interval basis. While it supports billing for fixed pre-determined rating periods,
5 such as those offered under a TOU design, it lacks the capability for different rates
6 to apply to usage during specific hours which are identified on a real-time basis to
7 reflect changes in utility cost. Information available to the customer at the meter
8 will also change since pricing won't be isolated to specific pre-determined time-
9 based rate periods. Total usage can continue to be provided on a meter register at
10 the customer's site, but meter data by interval will now need to be provided to
11 customers via a web portal on a one day lag. This interval level data will aid
12 customers in understanding how they consume electricity and empower them to
13 take steps to better control their consumption.

14 **Q. WILL CUSTOMER CONNECT PROVIDE THE CAPABILITY TO BILL**
15 **TIME-BASED RATE DESIGNS?**

16 A. Yes. Customer Connect will offer increased flexibility to bill innovative rate
17 designs and has already been used by other utilities to support critical peak pricing
18 designs.

19 **Q. IN ADDITION TO ACCESSING METER DATA, WHAT OTHER STEPS**
20 **ARE UNDERWAY TO HELP CUSTOMERS BETTER UNDERSTAND**
21 **HOW THEY CAN INFLUENCE THEIR COST FOR ELECTRICITY?**

22 A. Two keys necessary to support future rate designs are (1) communication tools and
23 (2) understandable designs. Dynamic rate designs will require routinely

1 communicating changes in the rate for electricity. Fortunately, there are now
2 numerous avenues available to conveniently provide real time rate information to
3 customers, including text messages, automated phone messages and website
4 notifications. Evaluation of effective customer communications is key to a
5 successful dynamic rate program and will be thoroughly investigated prior to
6 seeking approval of future dynamic designs.

7 **Q. WHAT CAN BE DONE TO HELP CUSTOMERS UNDERSTAND AND**
8 **RESPOND TO DYNAMIC RATE DESIGNS?**

9 A. The most technically sound rate design won't be successful if customers fail to
10 understand and respond to the price signals. Recent Company research concludes
11 that customers are often confused by electric terminology. Customers are often
12 unclear on how they can influence their usage and are often even confused by
13 standard industry terminology such as Basic Facilities Charge or demand,
14 preferring Administrative Charge and Peak Use. New designs will need to provide
15 clear messages regarding customer expectations to achieve bill savings. The Rate
16 Design team plans to work closely with marketing personnel to improve
17 communications regarding future tariffs. It is hoped that a better understanding of
18 tariff price signals, coupled with increased availability of meter data, will aid
19 customers in understanding the opportunities offered with dynamic designs to save
20 on their electric bill.

1 **Q. CAN NEW RATE DESIGNS BE SUBMITTED BEFORE THESE**
2 **INFRASTRUCTURE IMPROVEMENTS OCCUR?**

3 A. Yes, but it would be an inefficient exercise. It would be premature to offer a
4 specific rate design before the infrastructure to support the design is available. The
5 Company is actively pursuing several dynamic pricing pilots in its North Carolina
6 jurisdiction and will use this experience in developing future dynamic pricing tariffs
7 in South Carolina. While the pilots only target North Carolina customers, the
8 results will be directly transferable to South Carolina.

9 **GRID IMPROVEMENT PLAN (GIP) RECOVERY AND RATE UPDATE**

10 **Q. WHAT ISSUES HAVE BEEN RAISED REGARDING THE COMPANY'S**
11 **PROPOSED RECOVERY OF COSTS IN THE GIP STEP-UP?**

12 A. Walmart's witness Tillman stated GIP costs are primarily demand-related;
13 therefore, recovery should be based on a rate design that utilizes a kW demand
14 charge rather than a kWh energy charge.

15 **Q. DO YOU CONCUR?**

16 A. Yes, in theory. While I agree that the non-customer related costs are primarily
17 demand-related, I do not agree with recovering these costs using demand rates at
18 this time in this situation for two reasons. First, the Company prefers a uniform
19 approach to recovering grid-related costs in the rider that is consistent with cost
20 recovery in other annual adjustment proceedings. The proposed recovery is
21 consistent with all other adjustment clauses that are recovered using energy rates
22 and better supports the Company's ability to track the Rider GIP revenue for true-
23 up purposes. Demand billing units aren't routinely reported to the same extent that

1 kWh sales are publicized. Billing on demand would add complexity to future
2 recovery proceedings as the parties verify these determinants. Energy sales are
3 non-controversial and are a better choice. Secondly, not all customers within a rate
4 class are on demand billing, however, this approach could change if the Company
5 implements demand components for all rate schedules. Currently, Schedules OPT
6 and PG are the only DE Carolinas schedules that bill all participants for demand;
7 therefore, Witness Tillman is suggesting a completely unique approach under
8 Schedule OPT that wouldn't apply to the remainder of tariffs.

9 **Q. HAS THE GIP STEP-UP RATE BEEN UPDATED TO REFLECT**
10 **CHANGES TO THE FUNCTIONALIZED COST OF SERVICE?**

11 A. Yes. Company witness Hager has updated her testimony based upon intervenor
12 testimony and revised the functionalized allocation of costs recovery under the
13 Step-Up rates. Based upon her update, I have revised Pirro Exhibit No. 7 filed in
14 my direct testimony to reflect the revised allocations. Attached is Pirro Rebuttal
15 Exhibit No. 1 that reflects the revised allocation of costs and the rates recommended
16 by the Company for approval in this proceeding.

17 **EXCESS DEFERRED INCOME TAX RIDER EDIT**

18 **Q. WITNESS BARNES CONTENDS THAT REVENUES ASSOCIATED WITH**
19 **THE EDIT RIDER SHOULD NOT BE REFUNDED USING AN ENERGY**
20 **RATE, BUT ON A PERCENT OF BILL BASIS. DO YOU CONCUR?**

21 A. No, for the same reasons as cited above for recovery of the GIP cost, an energy rate
22 is more appropriate for. Most revenues associated with the EDIT Rider are demand-
23 related; however, refunding them through a demand rate is impractical since many

1 of the Company's tariffs do not bill customers on a demand basis. Updating and
2 refunding EDIT costs as a percentage of the bill adds unnecessary complication and
3 is inconsistent with all other annual clause adjustments and should therefore be
4 denied.

5 **HOURLY PRICING RATES**

6 **Q. PLEASE DESCRIBE THE HOURLY PRICING FOR INCREMENTAL**
7 **LOAD SCHEDULE HP THAT IS AVAILABLE TO THE COMPANY'S**
8 **LARGE CUSTOMERS.**

9 A. Schedule HP is a voluntary rate option that offers customers the opportunity to
10 purchase incremental energy differing from a baseline load at rates that more
11 closely match the Company's incremental cost of providing the kWh in the given
12 hour. Participants understand that hourly rates will vary throughout the year and
13 therefore offer opportunities to change consumption and benefit from the variable
14 pricing. It is available to nonresidential customers with a contract demand
15 requirement of 1,000 kW or greater and allows usage above or below a baseline
16 amount to be billed at a rate that varies each hour to reflect the Company's marginal
17 cost. Hourly rates are provided to participants on the prior business day. Baseline
18 usage is billed under an applicable standard tariff selected by the customer, while
19 the incremental use is billed at the hourly rate. The hourly rate includes the
20 expected marginal production costs including line losses and other directly-related
21 cost. An incremental demand charge and 0.5 cent per kWh incentive margin also
22 applies to incremental load additions.

1 **Q. HOW ARE HOURLY RATES UNDER SCHEDULE HP CALCULATED?**

2 A. Hourly rates are calculated based upon the marginal or dispatch cost of the
3 generator that is expected to serve the next kWh of system load based upon all
4 available generating plants. It reflects the change in the Company's fuel cost that
5 is anticipated if the customer decides to exceed or reduce load from their baseline
6 load. The determination of the marginal cost is also consistent with the
7 methodology used by the Company to price opportunity sales into the wholesale
8 market.

9 **Q. IS THE RECOMMENDATION OF SCEUC WITNESS O'DONNELL THAT**
10 **THE HOURLY RATE BE SET AT THE LOWER OF THE COMPANY'S**
11 **MARGINAL COST OR A WHOLESALE MARKET RATE**
12 **APPROPRIATE?**

13 A. No. The Schedule HP hourly rates are fundamentally based on Duke system
14 production costs; and not designed to represent or be a proxy for market based
15 pricing. The rate is designed to afford customers the opportunity and flexibility to
16 respond directly, through usage, to short term system costs. It is more analogous to
17 a synthetic bi-directional Demand Response product than a market based product.
18 Customers can increase usage as fits their process during periods of low system
19 costs or decrease their usage during periods of higher system costs. Duke actively
20 participates in the wholesale energy market to the practical limitations of system
21 reliability, transmission availability, and market liquidity, and customers benefit in
22 the aggregate from those market purchases. The HP product is not a market product
23 and was never intended to provide some customers with optionality beyond the

1 ability of the Company to provide appropriately priced service. Applying hourly
2 rates that are lower than the Company's marginal system cost would result in other
3 customers subsidizing Hourly Pricing customers. The current methodology best
4 reflects the Company's expected fuel cost and is therefore the appropriate basis
5 under which to set hourly rates.

6 **IV. CONCLUSION**

7 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

8 **A. Yes.**